



FIELD DAY 2003 JUNE 28-29

W4DW still holds the Field Day record* in the 7A-Battery class! In **1989**, W4DW reported 1281 QSO, all made with less than 5 watts. The 12 brave participants claimed a total of 11,550 points. That score has never been topped!

*Record? Well, of course it's "not a contest." Andy Peterson NI4S

Paul K9PM, Emily KA2WFM, Walter KM4BU, Tim N4IQA, Walter AB4DQ, Vince WA2SRJ, Matt KB2ACE, John KK4JB, "Boat Anchor Bob" NA4G, Dick N4LBA, Bob KC4CPD, Bill N3CL and Bill W4VNB were the guys & gal that were given the reward for the highest scoring in the 7A category at field day. They logged up 789 CW & 492 phone QSO's for a "raw" score of 11,550 points.

(Editors note: This article is located in the 1989 The RARS EXCITER.)



The Exciter

The **Exciter** is the monthly newsletter of the Raleigh Amateur Radio Society. It is available in both printed and electronic form. The printed version is mailed to members just before each club meeting. The electronic form, in Adobe Acrobat PDF format, is e-mailed about a week earlier.

We solicit both articles and advertising. The deadline for submissions is first Friday of the month or Friday after the monthly meeting. Contact the Editor.

The views contained in the Exciter are those of the individual authors, and are not necessarily the views of the Editor, or the Raleigh Amateur Radio Society.

The Raleigh Amateur Radio Society

The Raleigh Amateur Radio Society, Inc. (RARS) was founded in 1969 and continues to serve and support the Amateur Radio community in the greater Triangle area. In 1999, we incorporated a new RARS, and obtained 501(c)(3) Non-Profit tax status.

The objectives of the club are to promote worldwide friend-ship through Amateur Radio; to be of public service by providing radio communications in times of disaster, emergency, or civic need; to educate members in radio technique; and to provide training classes to assist in obtaining Amateur Radio licenses.

Anyone interested in Amateur Radio is eligible to apply for membership. Dues for regular licensed amateurs are \$18.00 per year (from July 1 through June 30). Additional immediate family members pay \$5.00 each per year. Dues for licensed amateurs older than 59 or younger than 16 are \$12.00 per year. Dues for non-licensed Associate members are \$9.00 per year.

Applications for membership may be obtained from the treasurer, or the RARS web site (www.rars.org).

Officers

President:	Bernard Blackmon W4BRB 919-467-8719 bernardb@mindspring.com
Vice-President:	Andy Peterson NI4S 919-845-6251 ni4s@arrl.net
Secretary:	Jim Walter KG4FIJ 919-468-5358 jwalter@nc.rr.com
Treasurer:	Greg Seamster KE4PAX 919-859-0029 ke4pax@arrl.net
Exciter Editor:	Denyse Walter KG4CXR 919-468-5358 kg4cxr@nc.rr.com



INFO

RARS Repeaters in Raleigh:
145.13
146.64
224.64
444.525 (88.5 PL)

WEB SITE <http://www.rars.org>

NEXT RARS MEETING: **July 1, 2003** **MARS - Military Affiliate Radio System**

What is MARS? It's a history of the program, how to get involved, and how to use MARS to send telegrams to those serving in the military

RALEIGH AMATEUR RADIO SOCIETY MEETINGS

Date: *Every first Tues of the Month*

Location: *Forest Hills Baptist Church, at Dixie Trail and Clark Avenue, in Raleigh*

Time: *7:30pm, Folks start showing up a bit before 7 to chat, brag and eat donuts.*

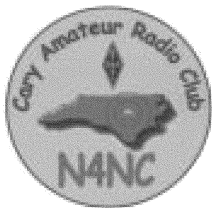
VE TESTING: *The RARS VEs will accept walk-in testing which is on even months except April and December. Please bring a photo ID, your original current license if you have one, and any CSCEs you need for credit.. Check into the 8:00 pm net every night on the 146.64 repeater or www.rars.org for information.*

RARS MEMBERSHIP DUES DUE JULY 2003

Membership renewals can be paid at RARS meetings, paid on-line, or mailed to the RARS treasurer. Mail To:

Greg Seamster
RARS Treasurer
1405 Leanne Court
Raleigh, NC 27606

RARS now accepts credit card payments online for new members and membership renewals. You can join or renew your membership online using a secure credit card payment process. See the RARS website www.rars.org for more information to sign up for RARS membership or renew 1, 2, or 3 years



The 31st Annual Cary Mid-Summer

SWAPFEST



Saturday, July 19, 2003

At The Air-Conditioned Cary Community Center on Academy Street

Tickets \$5.00 (Advance \$4.00) - for info, e-mail: n4nc@arrr.net

Dealers, Prizes, VE Exams, Forums

(Inside and Outside Fleamarket and Dealers - FREE Parking)

Cary Pre-Registration Form (Postmark By July 5, 2003)

Name _____

Address _____

City _____ State _____ Zip _____

Callsign _____

Pre-Registration Tickets

@ \$4.00 Each \$ _____

Tables (6-Foot)

@ \$10.00 Each \$ _____

Total Enclosed \$ _____

**Food and Drinks
On The Premises**

Talk-In On:
145.39-

Doors Open at 8:00 AM

Important Note: Weapons
and Pornographic materials
may NOT be displayed or
sold at the SwapFest Site.

Mail to: Cary Amateur Radio Club, P.O. Box 53, Cary, NC 27512-0053
INCLUDE S.A.S.E. (If No S.A.S.E. - Tickets will be held at the Door)

THE RARS AUCTION WILL
BE OCTOBER 7, 2003

All RARS members can obtain a membership
card by calling Denyse KG4CXR 919-468-
5358 or email KG4CXR@nc.rr.com

146.88 145.39, 147.105, & 147.135
Repeaters are supported by PCRN
if you would like to donate please
make checks to:
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Raleigh, NC 27605

More info on PCRN:
[Http://www.pcrn.net](http://www.pcrn.net)

SPECIAL REQUEST FOR ASSISTANCE WITH RADIO NEWS HOUR

We are looking for someone to share responsi-
bilities for playing the RARS Radio Newshour
every Sunday following the 8 PM net. The
equipment needed for this is an interface be-
tween your computer and radio, such as a
Rigblaster, as well as software to play a MPEG
file. If you have questions or would like to vol-
unteer, please contact Liz KF4UQZ or Mary
KG4OQA.

PUBLIC SERVICE EVENTS

**PUBLIC SERVICE EVENTS ARE COMING
UP. PLEASE LISTEN TO THE NETS FOR
MORE INFORMATION!**

A Problem that Can Damage Ham Gear

By Johnnie WA9SZL

This is a warning to all hams to be aware of a problem that can damage if not destroy our gear.

It's time one hundred twenty volts A.C. became the low limit with one hundred twenty five volts A.C. as the high limit!

I have personally measured line voltages as high as one hundred twenty eight volts A.C. on my Fluke model seventy nine true r.m.s. multi-meter here at my home in WENDELL.

This upward creep in A.C. supply voltage can and will do major damage to older ham gear, as well as ham rigs that are not so old, but were built with no safety margin in their power supplies. What can this do to our rigs? Well, let's look at an early model Heath Kit SB 200 as an example.

First of all the filament voltage to the directly heated 572B tubes will not be the recommended 6.3 VAC. Because of line voltage creep the tubes will see as much as 6.9 VAC! This will shorten expensive tube life. Also the high voltage doubler power supply has six (later models had eight) 450 WVDC capacitors series connected for 2700 WVDC total. The unloaded voltage can now be as high as 2600 VDC! This can cause a mighty big bang when those old electrolytic let go. This is a real problem in those older transmitters and power amps, that used high vacuum or mercury vapor rectifiers. Most of these units have had solid state rectifiers installed as replacements over the years. Also, in many of these units the filter choke has been removed or shorted across. Doing these things will increase the unloaded D.C. voltage of the power supply by several hundred volts! All of this is before the upward creep in A.C. line voltage over the years is added in.

Those older low voltage (13.5 vdc) supplies that were built with 25 WVDC input filter caps are also in trouble. They all must now be upgraded to 35 WVDC electrolytic to avoid the same type of over voltage failure. Low voltage electrolytic also make a big bang when they let go, and both can and will make a big mess inside your rig! So those of us that own older ham gear should beware of what line voltage creep can do to your rigs.

MINUTES OF THE RARS BOARD MEETING, TUESDAY, APRIL 15, 2003

The RARS board meeting was held at Forest Hills Baptist Church on Tuesday, Apr 15, 2003. Members present were: K4HF, K4HM, KE4PAX, KG4CXR, KG4FIJ, KN4AQ, W4BRB, and WA2UZO. Total present: 10.

The meeting was called to order by President Bernard Blackmon W4BRB at 7:30 PM.

On motion by K4HM, second by WA2UZO, the March 2003 board meeting minutes were approved.

V.P. Report: No report.

Treasurer's Report (KE4PAX): There are currently 298 members.

FM Committee: No report.

Exciter (KG4CXR): May issue is out. All going well.

Net Manager (W4BRB for KG4OQA): Nets are going very well.

Webmaster (WA2UZO): Roster and Exciter are posted on the web site.

Membership Services (KG4CXR): Nothing to report.

Hamfest (K4HM): Gave a preliminary report. Hamfest went well.

Field Day (W4BRB for N4HAF): Field Day planning is underway.

Public Information (KN4AQ): A reporter from WRAL visited KN4AQ to interview him for an upcoming hurricane special. More information about air date as it becomes available.

Education (KN4AQ for W4NOT): Recent Technician Class was a success. Six registered, 5 took the test, and 4 passed.

VE Team: No report.

Public Service (K1MRB reported for K1RCB): Gave report on recent MS walk, and advised of upcoming MS-150 and Autism event. WA2UZO will coordinate upcoming Crones and Colitis event on June 7, 2003. Reported that CCHH plans to start a public service net on Wednesday nights at 9:15 on 147.015.

ARRL Liaison (K4HF): Nothing to report.

W4DW/W4RNC Trustee: No report.

Special or Ad Hoc Committees: None.

Unfinished Business:

Report on Handi-Ham Camp was tabled until next month due to absence of W8HYD.

The May regular meeting will be on May 13, 2003 (one week later than normal).

New Business:

KE4PAX presented a proposal to have a food booth at the NC State Fair, to be operated by an outside organization but sponsored by RARS, profits to be shared. Discussion ensued. No action taken.

KE4PAX presented and reviewed the first draft of the 2003-2004 RARS budget.

On motion by K4HM the meeting adjourned at 9:30 PM.

ONE GOOD IDEA!

By John Scott, K8YC

Many years ago, my wonderful Norwegian boss, Einar “call me Bill” Almdale offered me the wisdom of his many years. We were talking about the time spent on the floor of a trade show as exhibitors and how much it cost in terms of opportunity lost. He said, “You know, John, if you come away from a trade show with one good idea, it’s worth it.”

Just as I was leaving the Charlotte Hamfest this year, I noticed a few issues of the ARRL’s QEX at the ARRL booth next to the CDXA booth. I asked if these particular issues were free for the taking, and the answer was “yes”. As I looked over the March/April 2003 issue later that day, I had found Einar’s “one good idea”.

In that issue was a discussion by Dan Maquire, AC6LA, of a wonderful adjunct to antenna modeling. It seems as if Dan had been in a beta version of the ARRL’s new antenna modeling course. The course uses two of the more popular PC-based modeling programs—NEC-Win Plus and EZNEC. One of the shortcomings noted by Dan about EZNEC was that small changes in a model required redefining and rerunning the model. At a minimum, the process was tedious and did not offer easy comparison between successive models. So, he decided to do something about it.

The result is a shareware product Dan now markets as MultiNEC for about \$40. MultiNEC contains the public domain NEC-2 antenna modeling engine used by both NEC-Win Plus and EZNEC, but its real strength is that it uses Excel spreadsheet input forms to allow modeling antennas parametrically rather than via the laborious replication method referenced above. Dan calls it “modeling by equation”. Don’t get me or Dan wrong. Both of the present commercial products are successful because they provide an easy to use interface to the NEC computing engine which was probably mainframe based somewhere in its developmental past. They also both have some wonderful graphical features to show you drawings of the antenna you’ve modeled as well as 2-D and 3-D plots of the antenna patterns.

Yet, when used as an adjunct to EZNEC, for example, it allows you to do the following:

- ♦ Use variables to control features of the model.
- ♦ Build complete model files—not just “wire” sets—in EZNEC binary format
- ♦ Use some of the user-friendly conventions of EZNEC such as split sources and “trap”-type loads.

- ♦ Show multiple radiation patterns as an animation instead of overlaying multicolored patterns on the same plot.
- ♦ Automatically find the resonant frequency, or automatically change the geometry or other characteristics of a model, so that it is resonant at a desired frequency.

If you don’t own a NEC-based modeling tool, MultiNEC at least gives you modeling capability without some of the goodies that EZNEC and NEC-Win Plus offer. It is probably worth it for that alone. But, for serious modeling, it seems like MultiNEC offers an excellent extension of your modeling toolkit when combined with the capabilities of EZNEC or NEC-Win PLUS. You’ll need Excel 97 or later to run MultiNEC after you download it from www.qsl.net/ac6la. I have the original article and a few copies. If this looks like your cup of tea and you’d like a copy of the article, let me know at k8yc@adelphia.net

This article is from The Pileup Official Newsletter of the Carolina DX Association. More about their club can be located at www.cdxa.org

Camille Durfee Operates RARSFest Talk-in

By Israel, N4ZVU

Over the 146.64 repeater her voice was synthesized and mechanical, but from behind her computer Camille was animated and full of enthusiasm. Certainly more than a few folks were puzzled when they heard Camille's computer recite her prepared remarks on the RARS 2 meter repeater during the 2003 Raleigh ham radio convention. Some might have even mistaken the synthesizer for the familiar "Romeo" and "Juliet" voices that key up the repeater every day.

But unlike the repeater controller, Camille Durfee has more on her mind than just making announcements on the club repeater. She has been cultivating an interest in ham radio for several years after having been introduced to the hobby by Israel, N4ZVU. After several classes and a visit to Handi-Ham camp last summer, she knows that a ham radio license is in her future.

Camille Works Hard At RARSFest

Determined to get on the air, RARSFest talk-in was the perfect opportunity for Camille to make her voice heard. In order to achieve that goal, Camille and Israel built a special station for her to use, prepared material for her to recite, and practiced getting on the air. Folks who listen to the RARS 2 meter net may have heard her make practice comments on several occasions. She also demonstrated the station at RARS meetings and at the RARS licensing class.

Prior to the hamfest, Joe, WA2UZO sent Camille a list of prepared statements that she could read on the air for talk-in. Israel typed these comments into Camille's computer so that she could retrieve them when the time came for her to make her announcements.

Just to make sure the voice pronounced the words reliably, phonetic spellings were used for callsigns (e.g. W4DW = Double-you, four, dee, double-you). When the time came for Camille to make her announcements, the phrases were just a few clicks away.

Camille's Station



Getting Camille on the air requires a special station that interfaces with her assistive technology. Camille uses a standard Windows laptop PC and special software to communicate. The software that is installed on Camille's computer is "EZKeys+ for WindowsXP" by Words+, Inc. (www.words-plus.com).

This product allows Camille to access her computer using just one switch positioned behind her head. The process is difficult to describe, but sample software can be downloaded from the Words+ website for those who would like to learn more.

Camille uses several different text-to-speech engines to "speak" using her computer. One package, "TextAssist" by Mindmaker reads her email and word documents. Another package provides a voice interface to the web.

EZKeys+ uses yet another speech engine to speak the words that she types, allowing her to make her own comments.

Credit goes to Andy, NI4S, for the next piece of station equipment -- a Signalink RL-1 sound-card-to-radio interface that acts like an automatic VOX switch whenever the computer sends an audio signal out of the sound card. A customized cable connects from the Signalink to the radio to activate the PTT and relay the audio. Unlike the RigBlaster and other offerings, the Signalink doesn't require a control link to the computer. This allows the device to be "plug-and-play" for Camille's Computer.

Camille's sound card is inaudible when it is connected to the Signalink, her control operator is not able to hear when she makes a comment or what she is saying. Therefore, the configuration is not complete without an audio amplifier and a splitter connected to a speaker between her computer and the Signalink. Now both the VOX and the control operator can hear her comments.

Continued on page 8 Ham Radio and People with Disabilities



RARS NEW MEMBERS

May 2003

We would like to welcome our new members to RARS. Thank you for considering us for your amateur radio club.

KC4AYH Lillian
Mark N4JMT
Shelby NC4SH

Keith N4QQH
Alanna K4AAC

NET REPORTS FOR May, 2003

- ♦ 8:00PM DAILY: RARS Evening Net
- ♦ 9:00PM MON: SWL SIG
- ♦ 8:30PM SAT : Tech & Traders net

Total Net Activity:

Minutes: 1122

Check-Ins: 537 in 40 Sessions

Traffic : 36 brought 31 passed

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Ham Radio and People with Disabilities

Ham radio is a hobby that appeals to many folks with disabilities. The ranks of ham operators include people with a wide range of sensory and motor impairments. Perhaps this is because of the many diverse ways in which people can participate in ham radio -- voice, cw, and digital. There are many, many ways to be a ham. Along with the many ways a person with a disability can be a ham radio operator, there is a special community that forms around the hobby. It takes two people to make two-way communication work -- people who are willing to talk, listen and share their expertise. The ham radio community is a very supportive group of people. Hams with disabilities rely on that community support. Born with cerebral palsy, Camille has almost no control over her body. She lives in a wheelchair and requires constant care twenty-four hours a day. Her life has been a constant struggle to achieve some measure of independence and control. Relying on family, friends and a collection of expensive technological tools she has demonstrated intelligence, wit, and (especially) a good-natured sense of humor.

One resource for Hams with disabilities is the Courage HANDI-HAM System. HANDI-HAMS is just one of the programs offered by Minnesota's Courage Center. HANDI-HAMS offers license training, nets, adaptive ham gear and support for people with disabilities who have an amateur license or are trying to get licensed. Camille has been a member of the HANDI-HAMS for several years. She anticipates returning for her second summer to Minnesota for HANDI-HAM camp this year.

Off to Radio Camp -- Again

Camille is looking forward to getting on the air again soon. She is planning to attend Handi-Ham camp again this year, and she expects to pass her technician class exam before returning home at the end of August. She appreciates all of the help she has received, and she had a wonderful time at the hamfest.

The day she gets off of the plane with her ham ticket there will be new challenges to getting her on the air. Before she can be her own control operator she will need to find new automation tools for her station. In addition to complete computer control, her station will require automatic identification, transmitter time-out timers, and more -- yet more technology to struggle with.

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MINUTES OF THE RARS MEETING, Tuesday, June 3, 2003

The meeting was called to order at 7:20 by Gary KN4AQ.

Treasurer's Report (Greg KE4PAX): There are currently 302 members. The 2003-2004 RARS budget was presented to the membership. After review, AC4ZO made a motion to approve the budget, K4HM seconded. It was passed unanimously.

ANNOUNCEMENTS: (by KN4AQ unless otherwise indicated)

- Exciters were mailed today, approximately 2 weeks later than usual. Also, the SERA Repeater Journal was recently mailed, later than normal.
- The annual RARS auction will be moved from the November meeting to the October meeting, to avoid conflict with election polling.
- Red Cross and Lowe's are sponsoring the annual Hurricane Preparedness Fair on June 21 at the Lowe's on Glenwood Ave. Bob K4RLC and Bob K1RCB are coordinating the amateur radio display.
- Field Day (N4HAF): Everything ready to go. Set up will be Fri Jun 21, Field Day will commence on Sat & Sun.
- The Winston-Salem Hamfest is on Jun 7.
- John Van Pelt is the newly appointed Skywarn Emergency Coordinator, replacing Thomas Babb.

PROGRAM: Bob K1RCB introduced Jeff Orrock of the Raleigh NWS, who is the Severe Weather Warning Coordination Meteorologist. Jeff conducted the Skywarn Advanced Storm Spotter Class.

RARSFest prize winners were drawn. Winners were AG4QZ and KO4CK.

Door Prizes won by: KG4PFA, AC4ZO, AB4OZ, KG4BBX, N4LEW, KA3PSK, KG4QHG, K4PSP.

Meeting adjourned at 9:35 PM.



Jeff Orrock Severe Weather Coordinator



Suzanne Naylor passed Tech test at the meeting.



Photos by Denyse KG4CXR & David KF4VXI

W4RAL BBS Back on Packet Network

By Dave WB4IUY

After more than a year, the W4RAL Packet BBS connection has been re-established with the outside world. After losing the feed via N4WFO's path from Roanoke Rapids (the N4WFO nodes were removed), things looked very gloomy. We tried all sorts of stuff, from packet paths all over the place, to Internet forwarding, etc so on. Finally, we were able to establish a path to WD4ELJ in Lynchburg VA, and the packet BBS network is alive once again! Traffic isn't flowing at full speed yet, but it's working and getting better.

Visit www.TEARA.org online to determine the best way to make your connection, or if in the Raleigh/Wake Forest/Clayton/Smithfield/Wilson/Rocky Mount area, try this:

Connect to W4RAL-7 on 147.54. Next, connect to W4RAL (this is the BBS). Once connected, the BBS will ask you a few questions, and away you go. You'll find a complete listing of BBS commands and explanations in the Packet Radio section of the www.TEARA.org website.

Stations too far south to reach W4RAL-7 on 147.54 can connect to W4RAL-4 on 145.01. This is usually a busy BBS-to-BBS frequency, but can be used for USER connections when unable to reach the BBS via the 147.54 W4RAL-7 node. Connect to W4RAL-4 on 145.01, then connect to W4RAL.

There is a directional node on 145.01, pointed directly at Wilson/Greenville on 145.01. From the east, you can connect to WB4IUY-7 on 145.01, then connect to W4RAL.

There are high speed ports, for those who might have 9600 baud modems and want to get on less busy frequencies and enjoy higher speeds. If you're in range of the Rolesville port, you can connect at 9600 baud on 441.00. Simply connect to W4RAL.

Also, if in range of the Rolesville port, you can connect on 223.70 at 9600 baud. If you're a bit further out, you can first connect to the WB4IUY-7 node on 223.70, then connect to W4RAL.

For those of you with 300 baud HF packet radio capability, there's yet another way to get to the W4RAL BBS... Dial up 14.105 (yep, on 20 meters), on USB, and connect to K4RTP-7. Once connected, use the "X" command to have the K4RTP-7 node switch frequencies and connect you to the BBS.

That would be: C K4RTP-7 (on 14.105) X W4RAL

There are new nodes in the works now, to improve connectivity from the Nashville/Greenville area and points east, as well as a new node site that is nearly completed in the Kerr Lake area.

One thing I forgot to mention... The W4RAL BBS feeds most of the remaining BBSs around central and eastern NC. So, if you're closer to another BBS, simply log in there...the traffic is passed all around, you only need to get on the nearest BBS to your locale.

So, c'mon and dust off the TNC, and get back in the habit of checking into the local W4RAL BBS, to see what's going on both locally, and from around the world!

**The Central Carolina
Skywarn Net Meets
Tuesdays at 9:15 PM
on 146.88 Repeater**



Remember to give damage reports AFTER the storms as well as DURING the storms.

NOTE: John VanPelt K4JVP has been elected as (Emergency Coordinator (EC) for Central Carolina Skywarn. 919-781-2787.

John (left) with Jeff Orrock (right)



Photo by Denyse KG4CXR

HAMS HELP IN KANSAS CITY, MO

By Denyse KG4CXR

Frank Walter, son of Jim and Denyse Walter is a TV producer in Kansas City, MO and was involved in bringing news from towns around the area that were hit with tornadoes last month. He was use to having coverage from CNN, but this time CNN was asking him for coverage. A helicopter pilot in the area watched a tornado form into a monster, and there were several Skywarn spotters that also saw the tornado. With the help of spotters and the helicopter pilot there were several lives saved because enough early warning was given to have people take cover, including warning to a large trailer park that was later destroyed. Severe weather spotting and reporting can save a life, it may be your own or a family members. Radar can only tell what MIGHT be happening but not what IS happening on the ground. If you see trees breaking, hail, or cloud rotation in a wall cloud it's best to report it to Skywarn net control or to the National Weather Service (NWS). Skywarn was started in the early 70's and since that time warnings have saved many lives. Report the county you are in, the city and street. Winds have to be measured and so does rain. Estimates SHOULD NOT be reported. Skywarn will be activated when there is severe weather in the area. **Severe means: measured winds above 58mph and causing damage, measured rain 1 inch or more an hour, hail and rotating clouds, funnel clouds and tornadoes which means the funnel cloud has reached the ground.** Keep your eyes to the sky. It may mean life and death.

If you were to eat out, where would you like to eat? We're getting ideas from the RARS members for a possible change in the RARS dinner on the 4th Tuesday of the month. Please email KG4CXR@nc.rr.com for your ideas.



Every Wednesday 9:30 145.19



**Join Us At the
RARS Dinner**



**On 4th Tuesday, 6:30 pm at
Fat Daddy's on Glenwood Ave.**

HAMFEST CALENDAR

July 12	Salisbury, NC
July 19	Cary, NC
July 26	Waynesville, NC
August 9 *	Fayetteville, NC
August 30-31	SHELBY, NC
October 12 *	Maysville, NC

* Date is not confirmed

Courtesy of the SERA Repeater Journal



Field day: If you like the outdoors, primitive camping, and working HF, or any other methods on ham radio, this is the place to be. RARS field day will be held at the Carroll Farm in Apex, N.C. The event begins June 28, Saturday at 2PM through Sunday 2PM. Setup of Field Day stations can begin after 2PM on Friday June 27. Field day is an annual ARRL sponsored event whose main purpose is to test our ability to setup and operate HF/VHF/UHF stations in the field using only emergency power. If you have any questions call Neal Fisher field day chairman at 848-8840 or email N4HAF@nc.rr.com



Photo by Gary KN4AQ

Field Day Chairman Neil N4HAF



Photo by David KF4VXJ



Photo by Gary KN4AQ